



C6 -14-2:3 CIDCO Colony, Bldg. No. 14, 2nd floor, Between Abhyudaya bank & Bhatia School,
above Pragati Computers, New Panvel, Navi Mumbai, Maharashtra 410206

Contact No. 9869210326, 9320224606, 022-27464220 Email : info@levanatech.com

Website: <http://www.levanatech.com>

Embedded Android & Device Drivers Development Training Workshop

Course Duration: Two Days (10 am to 5 pm)

Course Fee: Rs. 8,000/- (+ Tax)

Course Outline:

- **Choosing and installing the root filesystem (For H/W platform)**
 - Install the required tools
 - Intro to Repo & Git
 - Fetching the code
 - Compiling the code & build RootFS
 - Get used to Android Specific tools
- **Compile and boot an Android kernel (For H/W platform)**
 - Using the Android Emulator
 - Extract the patches from the Android Kernel
 - Compile and boot an Android kernel
 - Boot Android on a real board
- **Android Bootloaders**
 - What is a bootloader
 - Bootloader examples
 - The fastboot specifications from Android
- **Review of Linux Multi-process & Multi-thread programming**
- **Basics of Make utility**
- **Android build system**
 - Concepts introduced in the build system
 - Architecture of the Makefiles
 - Variables and functions available
 - Compilation steps
 - Add a new device to the build system
- **Android hardware support**
- **Manipulating solid-state storage devices**
- **System customization**
 - Add a device to the build system
 - Customize the "About" info, build ID, boot and home screens in your system
- **Custom cross-development toolchains, SDKs and NDKs**
- **Create the custom SDK**
- **Create the custom NDK**

- **Device driver development**
- **Android Framework and Applications**
 - Overview of the services, Content Providers and available applications in a standard Android Build Structure of a Service / Content Provider
 - How to access a native library from a Java app using the Java Native Interface (JNI)
- **Advanced Android Native Layer**
 - Discover the daemons handling the radio, external storage, launching applications, etc. Get to know the different components involved in the Android runtime, from the virtual machine to the media framework: StageFright, Flingers ...
 - Creating Static & dynamic libraries
 - Implement a Java interface to use the previously integrated library
- **Android AIDL mechanism**
 - HAL use - Amend the framework to make the libeacthw.so system service available to apps through binder
- **Android Application Development**
 - The application lifecycle
 - The various application components
 - How to access services
 - How to use, access and manage the resources
 - How apk packages are built and what do they contain

Advantages of Levana Technologies

- 100% Practical Oriented Workshops
- Industry Experienced Faculty
- Value for Money, Choose Modules of Your Choice
- Technical Support Even After Training

Levana Technologies conducts following workshops for Android Training

- Java Programming for Android Development - Two full days
- Android Application Development - Basic - Two full days
- Android Application Development - Advanced - Two full days
- Embedded Android & Android Internals - Two full days
- Embedded Android & Device Drivers Development - Two full days
- Android Testing - One full day

Other Fast Track Training Workshops conducted by Levana Technologies

- Integrated Linux Internals and Advanced Programming Training Workshop
- Embedded Linux and Device Driver Programming Training Workshop
- UNIX / Linux Shell Scripting with sed and awk Training Workshop
- Learn Japanese Language

Contact: Pratik

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At convenient travelling distance from Mumbai Central & Pune City.

For more details visit our website at <http://www.levanatech.com>